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Energie wende
Switch to the Future

Federal Ministry
for Economic Affairs
and Climate Action

Hydrogen in the US and Germany

Virtual Expert Delegation Tour and Bilateral Knowledge Exchange for Stakeholders from the US

April 26-28, 2022

In cooperation with:

AHK German American Chambers of Commerce
Deutsch-Amerikanische Handelskammern

adelphi

Virtual Expert Delegation Tour and Bilateral Knowledge Exchange for Stakeholders from the US

April 26-28, 2022

Content

WELCOME	3
IMPORTANT INFORMATION	4
GETTING STARTED	5
RECOMENDATIONS DURING THE EVENT	6
EVENT ETIQUETTE AND RULES	7
USEFUL ZOOM FEATURES FOR THE EVENT	8
AGENDA	11
PARTICIPANTS LIST	17
GERMAN SPEAKER PROFILES	19
NOTES	33
CONTACT	34

WELCOME

DEAR DELEGATES,

Welcome to the virtual expert delegation tour and bilateral knowledge exchange on hydrogen in the US and Germany!

With the change of national governments both in the US and Germany in 2021, both countries assume new global responsibility to reduce carbon emissions. One of the most promising building blocks in the race towards climate neutrality is hydrogen. Ambitious goals of making hydrogen competitive as a base material for industrial processes and as an energy source have been set. Whether the topic is production, delivery, storage, conversion, end-use applications, supply chain, standards, or workforce development, asking the right questions will be vital to navigating the complexity of this rapidly evolving field.

During this virtual expert delegation tour on hydrogen, participants will gain insights into the German hydrogen strategy and landscape. Flagship hydrogen projects in Germany will be showcased, and a space for discussion and networking with policymakers and hydrogen professionals will be provided. This virtual trip is part of a broader scale effort to strengthen the energy and climate cooperation between Germany and the United States, encourage the exchange of ideas, and promote policy and technology expertise.

During the three half-days the event takes place, you can expect:

- Presentations on the regulatory, technical, and economic issues that hydrogen faces in Germany.
- Presentation of flagship projects and how they fit into Germany's hydrogen strategy.
- Peer-to-peer knowledge exchange and virtual networking opportunities with stakeholders from policymaking, research and industry seeking to advance hydrogen deployment.
- Moderated group discussions and workshops aiming to turn learnings into actionable items.

To ensure that you get the most from taking part, we have prepared this small information booklet containing important information that you will find useful before, during and after the event.

We hope that you will enjoy the presentations and discussions with our German experts and fellow participants from the US!

Yours faithfully,

Berthold Breid
CEO RENAC

In cooperation with:

AHK German American Chambers of Commerce Deutsch-Amerikanische Handelskammern

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IMPORTANT INFORMATION

ZOOM LOGIN DETAILS FOR THE EVENT

Below is the Zoom link and login information for our three-day event on April 26-28, 2022:

ZOOM link: https://renac-de.zoom.us/j/83811723205?pwd=UUZUR1hGb2VRd2tvcWRrTThhV09MZz09

Meeting ID: 838 1172 3205
Password: 792821

CONTACT

For questions before, during or after the event, please contact:

Ms. Cecilia Strandberg
Project Director RENAC

Renewables Academy (RENAC) AG

Schönhauser Allee 10-11
10119 Berlin
Germany

E-Mail: energycooperation@renac.de
Phone: 0049 30 58 70870 42

Ms. Yuly Ruiz Vanegas
Project Manager RENAC

Renewables Academy (RENAC) AG

Schönhauser Allee 10-11
10119 Berlin
Germany

E-Mail: energycooperation@renac.de
Phone: 0049 30 58 70870 67

GETTING STARTED...

LOGIN

In order to join the event, **click the Zoom link and enter your password**. For the best experience and in order to be able to use all Zoom features and functionalities, we recommend downloading the **Zoom Client for Meetings desktop application**. If Zoom is not already installed on your computer, you will be prompted to do so when you first join the event if you have not done so before. This, however, is optional.

It is also possible to use Zoom through a web browser, although with limited features. In this case, we recommend using Google Chrome for the best experience. Please check the Zoom support website for a step-by-step guide on using the Zoom web client.

Technical support

Before the event, contact energycooperation@renac.de

During the event, contact

"Technical support" in Zoom chat via private message

REGISTRATION TIME AND TECHNICAL CHECK-IN

Please check in **15 minutes before the start of the event** to make sure that you can test your technical settings (video, audio, etc.).

To test the technical settings, click "Test speaker and microphone" after joining the event. If you encounter any technical difficulties, please contact us via e-mail to energycooperation@renac.de.

After successfully logging on to the platform, you can communicate any technical issues directly via private message to our **technical support** in the Zoom chat.

For more information about testing the technical set up, please click here.

NAME

Before joining the meeting, **please write your full name (name and last name) with the name of your organization in brackets**, e.g. Cecilia Strandberg (RENAC).

VIDEO AND AUDIO

When you join the event, your camera will be on and your mic off by default. The latter is to ensure that there is no disturbing background noise when someone is speaking. Please keep the set-up like this. However, we want you to take part in the discussion! The moderator will provide further indications during the event as to when and how to use your microphone.

RECOMMENDATIONS DURING THE EVENT

- Make sure you have a **stable internet connection.**
- **Ensure your computer is plugged in** to avoid it powering down during the event.
- **Use a headset** to avoid disturbing background noise.
- **Use a neutral background** and **ensure good lightning.**
- Be in a **room where you can work quietly and** without interruptions from other parties (especially recommendable in times of home office arrangements).
- Have a **pen and paper** at hand to take notes.
- Don't forget about a **glass of water** and **some snack(s)** to keep those energy levels high!

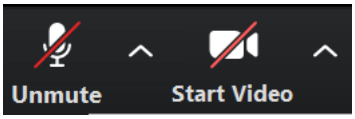
EVENT ETIQUETTE AND RULES

- **Be active.** The aim of this event is to provide a platform for exchange and discussion, and everyone present brings a wealth of experience to the table. In order for everyone to benefit the most from taking part we encourage you to be present and actively participate in the activities and discussions.
- **Keep your camera on.** In order to create an atmosphere that is conducive to an open and enriching exchange between participants, we ask you to please keep your camera on to try to achieve a feeling of proximity within the event's virtual environment.
- **Use the gallery mode.** We recommend you use the gallery mode which allows you to see all the participants at the same time. Please note that this is only possible using the desktop application.
- **Raise your hand if you want to contribute to the discussion** (see Zoom tools below). We want you to be involved, so please do not hesitate to ask your questions or contribute to the discussion. The moderator will facilitate interaction among participants to ensure an active and fruitful discussion.
- **Use the chat to ask questions.** We know that it is sometimes difficult to find the right time to ask a specific question during a presentation or a discussion. To make sure they are addressed, please write all your questions in the chat. We will constantly check the chat and make sure to collect all questions.
- **Be respectful of others.** For a pleasant discussion atmosphere, please respect the moderator of the event, the speakers, and all the other participants. This means listening actively and muting yourself if you are not speaking, as it avoids making any potentially disturbing background noise.
- **Be on time.** Please be on time for the events on the three days and log on well in advance of the start of the event. We all count on your participation in every session, from the beginning to the end.
- **Agree to disagree (if necessary).** Please consider the discussions as exchanges between experts for the purpose of learning. During the sessions, participants are free to express their opinions and concerns. Differences in approaches and strategies are more than welcome. Everyone should contribute to a calm, non-judgemental and sharing environment.

USEFUL ZOOM FEATURES FOR THE EVENT

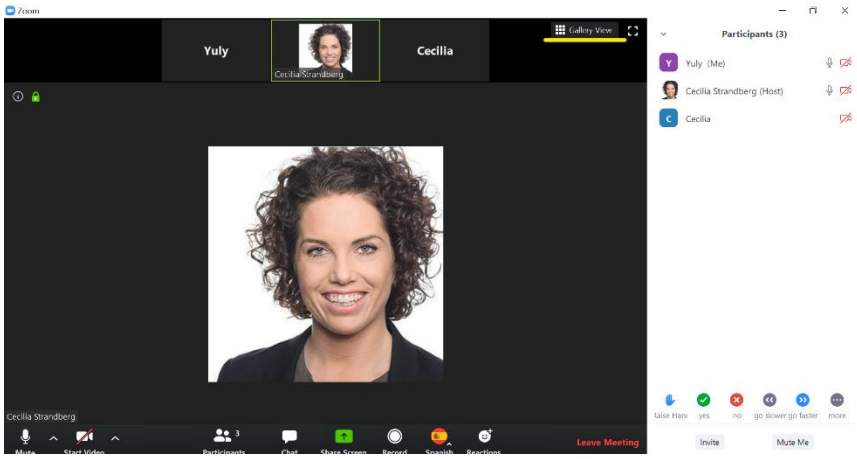
VIDEO AND MICROPHONE

You can activate/deactivate your microphone and camera by clicking on the Mute/Unmute and Start Video/Stop Video icons respectively. The microphone will be muted automatically for all participants during presentations and speaker slots to avoid background noise. During the event, the moderator will give clear instructions on how and when to use the microphone. Participants' cameras will be activated automatically when joining the meeting and are recommended to stay active at all times.



VIEWING THE MEETING

We recommend that you choose the "Gallery View" option so that you can see the speaker in a larger size or the documents they will be sharing.

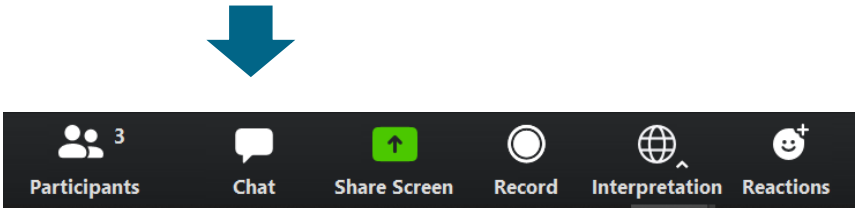


CHAT

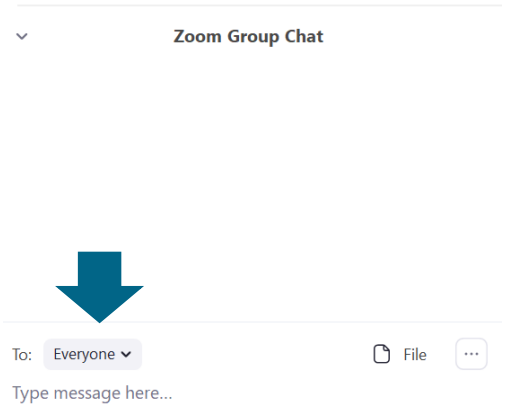
If you have a question or would like to make a written comment without interrupting the speaker, you are welcome to write in the chat. Please do not hesitate to use this channel, as we want to make sure all of your questions are addressed. We will also share files for you to download using the chat function from time to time.

Note: technical questions should be directed to "Technical Support" in a private message in the chat.

1) Accessing the chat function within Zoom:

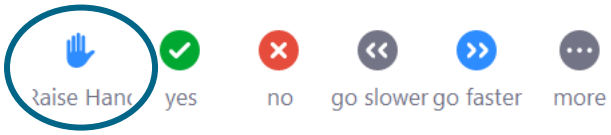


2) Selecting message recipients in the chat:



PARTICIPATION

If you want to make a comment – besides the chat - you can use the "Raise Hand" function.



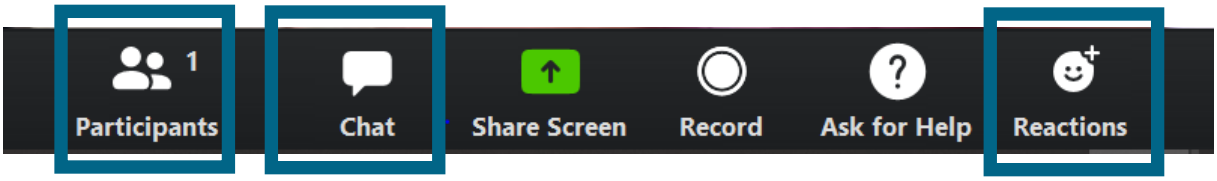
BREAKOUT SESSIONS

During the event, we will also work with "Breakout Rooms" where you will be able to network, socialize and work in smaller groups. The moderator will activate the breakout rooms when required. Within the rooms, participants will also be able to interact using the whiteboard and the chat function.

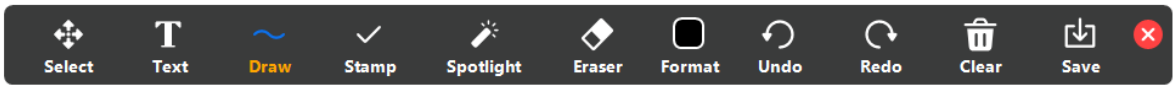
1) Whiteboard in breakout sessions

To activate the whiteboard, click on "Share Screen", from where you can choose to share the whiteboard. It is important that you save your results in case you want to share them with others later. If you need help or have any questions during a breakout session, click on "Ask for help". A notification will then be sent to the moderator who will join your group as soon as possible.

2) Control panel in break out rooms

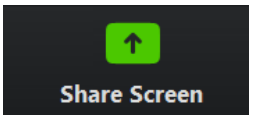


3) Whiteboard tools in break out rooms



SHARE SCREEN

During the group work you can share your screen or present the results of the group work in the main meeting.



AGENDA

Tuesday, April 26, 2022

Introduction & meeting with government agencies

Time EDT/ UTC -4 US East Coast *(CEST/ UTC +2 (GER))*	**Top**	**Speaker**
	Welcome and introduction	
09:45 a.m. *(03:45 p.m.)*	*Registration*	*Login to virtual platform*
10:00 a.m. *(04:00 p.m.)*	**Welcome and introduction** • Welcome/opening remarks • Introduction of IT-tools, Netiquette • Presentation of program & group session • Introduction session 1 & speaker	**Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de **Ms. Britta Schneider** *Manager, Government Projects and Trade Missions* German Support Office of the US-Germany Climate and Energy Partnership
10:30 a.m. *(04:30 p.m.)*	**Welcome and introduction to the international energy policy agenda** by the Federal Ministry for Economic Affairs and Climate Action (BMWK) - Keynote • Welcome and introduction to the international energy policy agenda • US-German bilateral working group on hydrogen • Snapshot - German energy transition (drivers, milestones, what has worked, what did not) • Role of (green) hydrogen	**Dr. Christine Falken-Grosser** *Head of Division, Climate and energy cooperation with industrialized countries, hydrogen initiatives* German Federal Ministry for Economic Affairs and Climate Action (BMWK) www.bmwi.de
10:45 a.m. *(04:45 p.m.)*	**Session 1: The German energy transition and the role of hydrogen** • Background, targets and status of the German Energiewende • Phasing out nuclear and coal • Role of (green) hydrogen for the German Energiewende • The German National Hydrogen Strategy • IPCEI projects • Support instruments for hydrogen, H2Global, H2Uppp	**Ms. Elisabeth Taher** *Policy Advisor, Division Cli-mate and energy cooperation with industrialized countries, hydrogen initiatives* German Federal Ministry for Economic Affairs and Climate Action (BMWK) www.bmwi.de

11:15 a.m. *(05:15 p.m.)*	**Session 2: The role of hydrogen in the US** Role, status quo and perspectives of (green) hydrogen in US energy policy	**Dr. Sunita Satyapal** *Director, Hydrogen and Fuel Cell Technologies Office and DOE Hydrogen Program Coordinator* U.S. Department of Energy www.energy.gov
11:30 a.m. *(05:30 p.m.)*	**Q&A and moderated group discussion**	**All participants** *Moderated by:* **Mr. Albrecht Tiedemann** *Head of Division* Renewables Academy (RENAC) AG www.renac.de
12:00 a.m. *(06:00 p.m.)*	*Virtual coffee / tea break* *Time for networking and socializing with fellow participants*	
12:20 a.m. *(06:20 p.m.)*	**Session 3: German hydrogen strategy and the role of the German national hydrogen council** • The German national hydrogen council • German hydrogen strategy: Background and ambition, drivers and targets • Strategy implementation • Hydrogen production and use cases in Germany • Q&A	**Dr. Felix Chr. Matthes** *Member of the German National Hydrogen Council, Research Coordinator Energy & Climate Policy at Öko-Institut (Institute for Applied Ecology)* The German National Hydrogen Council www.wasserstoffrat.de/en/
12:50 p.m. *(06:50 p.m.)*	**Q&A and moderated group discussion**	**All participants** *Moderated by:* **Mr. Albrecht Tiedemann** *Head of Division* Renewables Academy (RENAC) AG www.renac.de
01:20 p.m. *(07:20 p.m.)*	**Conclusion and summary of day 1** • Feedback round • Outlook to day 2 • Introduction networking/group work session	**Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de
01:30 p.m. *(07:30 p.m.)*	*Networking and get-together in groups between US participants for group presentation on day 3*	

End of day 1

In cooperation with:

AHK German American Chambers of Commerce Deutsch-Amerikanische Handelskammern

adelphi

Wednesday, April 27, 2022

Meeting with German hydrogen initiatives and clusters

Time EDT/ UTC -4 US East Coast *(CEST/ UTC +2 (GER))*	**Top**	**Speaker**
	Welcome and introduction	
09:45 a.m. *(03:45 p.m.)*	*Registration*	*Login to virtual platform*
10:00 a.m. *(04:00 p.m.)*	**Welcome to day 2** • Recap of day 1 • Introduction to day 2 and introduction of speakers	**Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de
10:15 a.m. *(04:15 p.m.)*	**Session 4: Green hydrogen flagship projects in Germany** • Project show cases: TransHyDE, H2Giga, H2Mare • International cooperation potential in project development and research	**Dr. Gesine Arends** *Head of Basic Research Energy Infrastrutures* Project Management Jülich (PtJ) www.fz-juelich.de/ptj
10:45 a.m. *(04:45 p.m.)*	**Session 5: International supply chain for hydrogen** • Global demand and availability • International Supply Chain for Hydrogen • Transport, storage and distribution of hydrogen • HySupply – Feasibility study on intercontinental supply chain for hydrogen • Q&A	**Dr. Eberhard von Rottenburg** *Deputy Head of Department Energy and Climate Policy Division* **Ms. Mantė Bartusevičiūtė** *Project Manager of HySupply* Federation of German Industries (BDI) www.bdi.eu
11:15 a.m. *(05:15 p.m.)*	**Q&A and moderated group discussion**	**All participants** *Moderated by:* **Mr. Albrecht Tiedemann** *Head of Division* Renewables Academy (RENAC) AG www.renac.de

11:35 a.m. *(05:35 p.m.)*	*Virtual coffee / tea break* *Time for networking and socializing with fellow participants*	
11:55 a.m. *(05:55 p.m.)*	**Session 6: German hydrogen strategy and implications for the regulatory framework** • Overview: National Organisation Hydrogen • HyLand – regional funding approaches • Status of hydrogen infrastructure and use in Germany • Current challenges in infrastructure deployment • Regulatory issues in Germany & the EU • Q&A	**Ms. Luisa Boll** *Programme Manager International Partnerships* NOW – National Organisation Hydrogen and Fuel Cell Technology www.now-gmbh.de
12:25 a.m. *(06:25 p.m.)*	**Session 7: Hydrogen networks in Germany – an example** • Background, approach and target • Activities and projects • Structural change and regional opportunities • Q&A	**Mr. Maciej Satora** *Research Associate* Hydrogen Network Lausitz DurcH2atmen www.durchatmen.org Fraunhofer Institute for Machine Tools and Forming Technology (Fraunhofer IWU) www.iwu.fraunhofer.de Fraunhofer Hydrogen Lab Görlitz https://www.hydrogen-lab.de/
12:55 p.m. *(06:55 p.m.)*	**Q&A and moderated group discussion**	**All participants** *Moderated by:* **Mr. Albrecht Tiedemann** *Head of Division* Renewables Academy (RENAC) AG www.renac.de
01:20 p.m. *(07:20 p.m.)*	**Conclusion and summary of day 2** • Feedback round • Outlook to day 3 • Introduction networking/group work session	**Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de
01:30 p.m. *(07:30 p.m.)*	*Networking and get-together in groups between US participants for group presentation on day 3*	

End of day 2

Thursday, April 28, 2022

Meeting with the hydrogen industry

Time EDT/ UTC -4 US East Coast *(CEST/ UTC +2 (GER))*	**Top**	**Speaker**
	Welcome and introduction	
09:45 a.m. *(03:45 p.m.)*	*Registration*	*Login to virtual platform*
10:00 a.m. *(04:00 p.m.)*	**Welcome to day 3** • Recap of day 2 • Introduction to day 3 and introduction of speakers	**Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de
10:15 a.m. *(04:15 p.m.)*	**Session 8: Hydrogen in the steel sector** • Decarbonization in the steel sector • Project overview • Key figures, achievements and challenges • Q&A	**Dr. Alexander Redenius** *Head of Division Efficiency of Resources and R&D Coordination* Salzgitter Mannesmann Forschung GmbH www.szmf.de
10:45 a.m. *(04:45 p.m.)*	**Session 9: Project showcase – hydrogen infrastructure and use on an industrial scale** • Project overview • Key figures of project • Achievements and challenges • Q&A *Further project partner representatives from the "Westküste100" project joining for discussion:* **Prof. Dr.-Ing. Klaas Völtzer** *West Coast University of Applied Sciences (FHW), www.fh-westkueste.de* **Dr. Kay Bareiß** *Thüga AG, www.thuega.de* **Ms. Lisa Bauer** *Thüga AG, www.thuega.de*	**Dr. Frank Schiller** *Head of ITE's group Economy and Society at the Institute for the Transformation of the Energy System (ITE) at the West Coast University of Applied Sciences (FHW)* West Coast University of Applied Sciences (FHW) www.fh-westkueste.de Project partner in "Westküste100" project: www.westkueste100.de/en/

11:15 a.m. *(05:15 p.m.)*	**Q&A and moderated group discussion**	**All participants** *Moderated by:* **Mr. Albrecht Tiedemann** *Head of Division* Renewables Academy (RENAC) AG www.renac.de
11:45 a.m. *(05:45 p.m.)*	*Virtual coffee / tea break* *Time for networking and socializing with fellow participants*	
12:05 a.m. *(06:05 p.m.)*	**Session 10: Presentations by US participants** • Group presentations by US participants on lessons learned from the delegation trip (4 groups, 4 presentations)	**All US participants** *Moderated by:* **Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de
12:50 p.m. *(06:50 p.m.)*	**Q&A and moderated group discussion**	**All participants** *Moderated by:* **Mr. Albrecht Tiedemann** *Head of Division* Renewables Academy (RENAC) AG www.renac.de
01:05 p.m. *(07:05 p.m.)*	**Final session: Feedback round and evaluation** • Concluding remarks and next steps • Feedback round • Evaluation • Closing of virtual expert delegation trip	**All participants** *Moderated by:* **Ms. Cecilia Strandberg** *Project Director & Moderator* Renewables Academy (RENAC) AG www.renac.de

End of day 3 and delegation trip program

Please note: The programme organizer reserves the right to change the content and schedule of the agenda according to availability of the proposed organizations and their speakers on short notice.

US PARTICIPANTS LIST

#	Name	Last name	Position	Institution
1	Rizaldo	Aldas	R&D Program Lead	California Energy Commission
2	Christian	Appel	Global Chief Engineer, Fuel Cell Truck	Nikola Corporation
3	Oliver	Baumann	President & CEO	Baumann Consulting, Inc.
4	Jane	Berner	Hydrogen Infrastructure Senior Analyst	California Energy Commission
5	John	Buttles	President	Texas Wind Tower
6	Asha-Dee	Celestine	Science and Technology Policy Fellow	US Department of Energy/ORISE
7	Jack	Chang	Analyst	California Public Utilities Commission
8	Kirt	Conrad	CEO	Stark Area Regional Transit Authority
9	Miki	Crowell	Air Pollution Specialist	California Energy Commission
10	Katrina	Fritz	Executive Director	Stationary Fuel Cell Collaborative
11	Jennifer	Gangi	Director of Communications and Outreach	Fuel Cell and Hydrogen Energy Association
12	Robert	Hebner	Director, Center for Electromechanics	University of Texas at Austin
13	David	Ingram	Director of Hydrogen and Sustainable Materials	Phillips 66
14	Jay	Kapat	Professor and Director/CATER	University of Central Florida

15	Ramanan	Krishnamoorti	Chief Energy Officer	University of Houston
16	Timothy	Lipman	TSRC Co-Director	UC Berkeley - Transportation Sustainability Research Center (TSRC)
17	Brandon	Moffatt	VP	StormFisher
18	Philippe Bertrand	MORIN	Hydrogen Business Development Director	Chemtrade Logistics
19	Brett	Perlman	CEO	Center for Houston's Future
20	Nakul	Prasad	Corporate Strategy Manager	Siemens Energy, Inc.
21	Shripad	Revankar	Professor	Purdue University
22	Omar	Rubio	Business Development Manager	Siemens Energy
23	Genevieve	Saur	Sr. Research Engineering Analyst for H2 Systems	National Renewable Energy Laboratory
24	Kelly	Smith Burk	Director	Office of Energy, Florida Department of Agriculture and Consumer Services
25	Andy	Steinhubl	Chairman	Center for Houston's Future
26	Xiao-Dong	Zhou	Stuller Endowed Chair and Director	Institute for Materials Research and Innovation, University of Louisiana at Lafayette

GERMAN SPEAKER PROFILES

By order in the programme:

Dr. Christine Falken-Grosser
Head of Division, Climate and energy cooperation with industrialized countries, hydrogen initiatives
German Federal Ministry for Economic Affairs and Climate Action (BMWK)

Dr. Christine Falken-Grosser is heading the division for Bilateral Energy Cooperation within the Federal Ministry for Economic Affairs and Climate Action.

Previously she headed the German Delegation to the Paris Club and worked in the field of foreign investment finance policies and with multilateral development banks. For four years Christine served as the Economic Counsellor in the Embassy of Germany in Bangkok, Thailand, where she supported German Companies in their endeavours abroad and coordinated German bilateral industry, energy, climate and scientific cooperation with the Kingdom of Thailand. Before she went abroad, Christine took part in several bilateral trade negotiations, amongst others with Canada, Japan and Vietnam for services and investment issues. A former responsibility included also the negotiation of the 3rd trading period of the Emissions Trading Scheme in Brussels.

Christine holds degrees in Economics and Business Studies and a doctorate in Public Finance, she was born in Leipzig and is married with two children.

Ms. Elisabeth Taher
Policy Advisor, Climate and energy cooperation with industrialized countries, hydrogen initiatives
German Federal Ministry for Economic Affairs and Climate Action (BMWK)

At the BMWK in the department "Climate and Energy Cooperation with Industrialized Countries, Hydrogen Initiatives" as a policy advisor and responsible for the implementation and further development of the import instrument "H2Global" as well as for the bilateral energy and climate partnership with Canada. Previously 3 years as policy advisor in the BMUV in the Department of Environment and Economy among other things collaboration on the decarbonization of the economy, such as the sustainable hydrogen ramp-up. Market analyses in the field of green tech, promotion of green start-ups. Has experience in the economy especially in the fields of climate, energy and mobility.

Studied economics and political science with an international focus. Married with one child.

Virtual Expert Delegation Tour and Bilateral Knowledge Exchange for Stakeholders from the US

April 26-28, 2022

German Federal Ministry for Economic Affairs and Climate Action (BMWK)

Responsibilities within the field of energy and climate policy are being pooled in the BMWK. This is enabling an "energy policy from one source" and offers the advantage of covering the energy market in its entirety.

The BMWK is responsible for all issues relating to the Energiewende. Its goal is a secure, environmentally friendly and affordable energy supply.

Thanks to appropriate framework conditions, the BMWK will ensure that the Energiewende becomes a driver for investment and modernization that contribute to innovation, economic growth and employment.

www.bmwi.de

Federal Ministry
for Economic Affairs
and Climate Action

Dr. Felix Chr. Matthes
Member of the German National Hydrogen Council, Research Coordinator Energy & Climate Policy at Öko-Institut
Öko-Institut (Institute for Applied Ecology)

Dr. Felix Chr. Matthes holds a degree in electrical engineering (Leipzig University of Technology) and a doctorate in political science (Free University of Berlin). He has worked in industry since 1991 and held various positions at the Öko-Institut, where he was deputy managing director from 2002 to 2004 and is currently research coordinator for energy and climate policy since 2009.

His research and consulting work focuses on climate neutrality strategies, energy market design, the design and evaluation of policy mix concepts with special consideration of CO2 pricing, as well as technology-specific issues of system analysis (infrastructures, coal, nuclear energy, hydrogen) in Germany, Europe and internationally (especially in Asia and the USA).

He has also been a member of the German Commission on Growth, Structural Change and Employment (also known as the German Coal Commission) and is a member of the National Hydrogen Council, where he heads working group 2 (Production, Imports and Safeguarding Integrity).

Öko-Institut (Institute for Applied Ecology)

In its book "Energy transition – growth and prosperity without oil and uranium" published in 1980, Oeko-Institut presented scenarios for an alternative energy future. Decades after the publication of this study, Oeko-Institut researchers are working on a range of topics to support and drive forward the necessary transition to a low-carbon society.

Based on value-oriented research, the institute provides research and consultancy for German, European and international decision makers in politics, industry and civil society, showing them ways of tackling the environmental challenges. The experts draw upon a broad array of scientific and research methods to develop appropriate strategies and toolkits.

Öko-Institut e.V.
Institut für angewandte Ökologie
Institute for Applied Ecology

www.oeko.de/en/

Dr. Gesine Arends
Head of Basic Research Energy Infrastrutures
Project Management Jülich (PtJ)

Dr. Gesine Arends is a Mechanical Engineer with a PhD in fuel cells modelling and a background in industrial energy technology development. At PTJ, she has coordinated the BMBF Hydrogen Flagship Projects from their inception. Her group supports project funding in the areas of P2X, energy networks and energy storage.

Project Management Jülich (PtJ)

Project Management Jülich supports government funding of research and innovation on behalf of public authorities at federal and federal state level and the European Commission. We work on a neutral and independent basis from four business locations with about 1,500 employees. PTJ combines scientific and administrative expertise in a broad spectrum of topics: Energy and Climate, Sustainable Development and Innovation, Research and Society.

Participation in this event is on behalf of the Federal Ministry of Education and Research, Division 722 - Energy; Hydrogen Technologies.

www.fz-juelich.de/ptj

Dr. Eberhard von Rottenburg
Deputy Head of Department Energy and Climate Policy
Federation of German Industries (BDI)

Dr. Eberhard von Rottenburg is Deputy Head of the department energy and climate policy in the Federation of German Industries (BDI). Before, he acted as an energy lawyer in the German Association of Energy and Water Industries (BDEW). His working experience includes activies at the Berlin Appellate Court, the Deutsche Bank (Frankfurt) and the German Embassy in Israel. He studied German, European and Russian Law at the Universities of Passau (Germany) and St. Petersburg (Russia) and wrote a doctoral thesis on energy and world trade law at the Free University of Berlin.

Ms. Mante Bartuseviciute
Project Manager of HySupply
Federation of German Industries (BDI)

Mante Bartuseviciute, born in 1995 in Lithuania, is working as a project manager for the cooperation project HySupply between the Federation of German Industries (BDI) and acatech - National Academy of Science and Engineering. Together with Australian partners the project team is investigating the feasibility of a German-Australian supply chain of renewable hydrogen.

After finishing her BA in Political Science at the Free University of Berlin in 2018, Ms. Bartuseviciute gained her MBA in Energy Management at the Technical University of Berlin, where she focused on the topics of innovation diffusion and renewable hydrogen market ramp up. In her work as a freelance political assistant, she dealt with climate and energy policy in the EU, renewable energy policy in Lithuania, electricity grids and EU regulation.

Federation of German Industries (BDI)

The BDI is the umbrella organization of German industry and industry-related service providers. 40 industry associations, more than 100,000 companies with around eight million employees in Germany and 15 state representatives make us the voice of German industry. As an interest group, we address the positions of a wide range of industrial sectors and industry-related service providers. We highlight the impact of economic policy on society, provide information and economic policy advice on all industry-relevant issues, and assist in opening up international markets by providing political support. We have an extensive network in Germany and Europe, in all important markets and in international organizations.

https://bdi.eu/

BDI
The Voice of German Industry

Ms. Luisa Boll
Programme Manager International Partnerships
NOW – National Organisation Hydrogen and Fuel Cell Technology

Luisa Boll is Programme Manager for International Partnerships at NOW GmbH, located in Berlin. In her role, she manages and builds NOW GmbH's international collaboration with partner countries and multilateral initiatives outside of Europe with a focus on hydrogen, fuel cells and e-mobility.

Luisa is the main liaison at NOW GmbH for the work of the IPHE, monitoring its activities closely alongside other international developments around the ramp-up of a global hydrogen economy. She is also responsible for managing and expanding bilateral cooperations between NOW GmbH and institutions in the US, Canada and Australia.

Previously, Luisa worked with several policy institutes in Europe and Australia — including four years in Sydney — on the topic of sustainability at the interface between the private sector, government and academia. She holds a Master's Degree in International Relations.

NOW – National Organisation Hydrogen and Fuel Cell Technology

The National Organisation Hydrogen and Fuel Cell Technology (NOW GmbH) is a public programme management organisation of the German Federal Government. It is responsible for the coordination and management of different government programmes, including the National Innovation Programme Hydrogen and Fuel Cell Technology (NIP).

NOW GmbH supports research, development, and demonstration activities along with procurement initiatives for the purpose of market activation. NOW GmbH is tasked with initiating and evaluating projects and, where possible, interlink them to create synergies. NOW GmbH aims to raise overall awareness of hydrogen, fuel cells and e-mobility through public communication activities and through supporting the knowledge transfer at the interface of policy, industry and research. Part of NOW's mission is also to enhance international collaboration, for example through working towards common standards and regulations.

www.now-gmbh.de

NOW
NOW-GMBH.DE

Mr. Maciej Satora
Research Associate
Hydrogen Network Lausitz DurcH2atmen, Fraunhofer Institute for Machine Tools and Forming Technology (Fraunhofer IWU), Fraunhofer Hydrogen Lab Görlitz

Maciej Satora graduated from the Technical University of Berlin with a M.Sc. in mechanical engineering specializing in calculation and simulation.

Within the scholarships, he studied also in Sydney (Australia) and in Tomsk (Russia). He gained practical experience at Siemens in Berlin, where he dealt with the coatings of gas turbines, and at Daimler in Sindelfingen, where he was responsible for the development of elastomers.

He has been a research assistant at the Fraunhofer IWU since March 2020. In the Hydrogen Technologies Group in Zittau, he works on planning and development of the Hydrogen Lab Görlitz.

Hydrogen Network Lusatia DurcH2atmen

Hydrogen as a key element is playing an increasingly important role in the comprehensive structural change in the Lusatia region. The three project partners, the Cottbus Chamber of Industry and Commerce (IHK), the Cottbus-based CEBra - Center for Energy Technology Brandenburg e.V. and the Fraunhofer Institute for Machine Tools and Forming Technology IWU in Zittau, have pooled their expertise to professionalize networking and project work and to initiate and provide technical support for regional hydrogen projects. For all companies and municipalities wishing to develop or advance hydrogen projects in the Brandenburg-Saxon Lausitz region, the network is the first point of contact for orientation and individual advice.

DURCH ATMEN H_2
WASSERSTOFFNETZWERK LAUSITZ

www.durchatmen.org

27

Dr. Alexander Redenius
Head of Division Efficiency of Resources and R&D Coordination
Salzgitter Mannesmann Forschung GmbH

Dr. Alexander Redenius: Studied industrial engineering (specializing in mechatronic engineering) at the University of Paderborn followed by a doctorate at the Heinz Nixdorf Institute in the field of mechatronic systems development.

After receiving his PhD he worked for an automotive supplier in the development department.

Since 2008 he has been an employee of Salzgitter Mannesmann Forschung GmbH, the central research unit of Salzgitter AG. He is responsible there for the area of resource efficiency and R&D coordination. Since 2015 he has part of the SALCOS program, which is a concept for almost CO2-free steel production in Salzgitter.

Salzgitter AG

For more than 150 years, the companies of the Salzgitter Group have been synonymous with the innovative and sustainable manufacture of steel and technology products. What started with the idea of making iron and steel from ore sourced in Lower Saxony has evolved into a international group that includes world-renowned brands such as Peiner Träger, Mannesmann or KHS. Today, around 25,000 people work to provide customers from a range of sectors with innovative and sustainable products of the highest quality. Our core competencies are in the production of rolled steel and tube products, as well as their processing and the global trade in these goods. In addition, we are also successful in the field of specialist machinery and plant Engineering.

With SALCOS® (Salzgitter Low CO2 Steelmaking), we have joined forces with partners from industry and research to lay the foundations for virtually CO2-free steel production. Central elements of the concept are electricity from renewable sources and its use in the production of hydrogen by means of electrolysis. This green hydrogen will replace the coal we currently use in the conventional blast furnace process. This will be possible with the help of so-called direct reduction plants, in which iron ore is reduced to iron directly in the solid state by hydrogen. This technology emits water vapor instead of CO2. Our program SALCOS® thus pursues the Carbon Direct Avoidance approach, which stands for avoiding the generation of CO2 in steel production from the outset. Overall, our approach enables us to reduce CO2 emissions in steel production by over 95%.

SALZGITTER AG
Mensch, Stahl und Technologie

www.szmf.de

Dr. Frank Schiller
Head and Group Manager Economy and Society at the Institute for the Transformation of the Energy System (ITE)
West Coast University of Applied Sciences (FHW)

Dr. Frank Schiller is head of the ITE's group Economy and Society at the West Coast University of Applied Sciences. He holds a PhD in political science following his studies at the University of Göttingen and Cornell, USA.

Frank has worked on a number of research projects in Germany as well as the United Kingdom, which concerned organizational risk management but involved above all the sustainable transformation of material and energy flows in various fields and areas.

He has worked with DEFRA (UK), E.ON Central Networks (UK), SH Netz AG and others, including local stakeholders.

Prof. Dr.-Ing. Klaas Völtzer
Professorship for Automation Technology, West Coast University of Applied Sciences, Institute for the Transformation of the Energy System (ITE)
West Coast University of Applied Sciences (FHW)

Prof. Dr.-Ing. Klaas Völtzer is head of the ITE's group Automation at the West Coast University of Applied Sciences.

His main research topics are data-driven modeling, dynamical systems, and control in the field of sustainable transformation of energy systems. Klaas holds a PhD in engineering at Leibniz University of Hannover, following his studies of mechatronics at TU-Hamburg. He worked on automation topics in the process industry and manufacturing engineering.

West Coast University of Applied Sciences (FHW)

The West Coast University of Applied Sciences (FHW) has the mission to carry out scientific research in step with current practice. Its independent research and research transfer activities enable an up-to-date job training of its students. Furthermore, the transfer of scientific knowledge increases the competitiveness of companies and institutions on the West Coast of Schleswig-Holstein and beyond.

The FHW's Institute for the Transformation of the Energy System (ITE) is the first of its kind on the West Coast. Its key research areas are building technology, sector coupling, grit integration, energy law, and economy & society. Its know-how is made available for companies and institutions in the region and beyond through joint projects and other forms of knowledge transfer. The institute is currently involved in nearly twenty research projects.

www.fh-westkueste.de

FH Westküste
Wirtschaft und Technik

Dr. Kay Bareiß
Project Leader Hydrogen - Subproject "greener heating" of "WESTKÜSTE100
Thüga AG

Dr. Kay Bareiß is working at Thüga AG in several hydrogen topics with focus on blending hydrogen in the existing natural gas-pipelines. He is project leader in the subproject "greener heating" of the "WESTKÜSTE100" project.

Kay holds a doctoral degree in electrical-engineering and energy technology at TUM where he conducted research in energy system modeling by using hydrogen as key element in sector coupling.

Ms. Lisa Bauer
Project Manager Innovation - Co-project lead Subproject "greener heating" in "WESTKÜSTE100
Thüga AG

Lisa Bauer is part of the interdisciplinary hydrogen team at Thüga AG in Munich. She works as co-project lead in the subproject "greener heating" in "WESTKÜSTE100".

She synchronizes project findings with the current energy political landscape and works on communication concepts for the local population with the goal to transform and decarbonize the heating sector.

Lisa holds a master degree in process engineering following her studies at FAU Erlangen-Nürnberg and is convinced that the sustainable cross-sectoral energy transformation is one of the key priorities at the moment

Thüga Aktiengesellschaft (Thüga)

The Munich-based Thüga Aktiengesellschaft (Thüga) is an investment and consulting company. Founded in 1867, it is a minority shareholder in around 100 municipal energy and water management companies throughout Germany.

The respective majority shareholders are cities and municipalities. Thüga as a minority shareholder provides access to specialized knowledge and the benefits that come from pooling activities and resources within the Thüga network.

Consulting and services provided by Thüga and its platforms focus on leveraging profitability of utilities. Together with its partners, Thüga forms the largest municipal association of local and regional energy and water supply companies in Germany - the Thüga Group. The common goal is to shape the future of municipal energy and water supply.

www.thuega.de

Virtual Expert Delegation Tour and Bilateral Knowledge Exchange for Stakeholders from the US

April 26-28, 2022

This virtual delegation tour is organized by the Renewables Academy (RENAC) AG in cooperation with the German Secretariat of the Energy Partnership with Canada and adelphi as part of a broader effort within the Energy Partnership between Canada and Germany

Renewables Academy (RENAC) AG

The Renewables Academy AG (RENAC) is one of the leading international providers of training and educational programming and capacity building services on renewable energy and energy efficiency. Established in Berlin, Germany in 2008, RENAC's mission is to disseminate the necessary know-how to facilitate the transition towards low-carbon energy economies. This transition is foundational for building a sustainable future.

As part of this process, RENAC has trained over 25,000 professionals from 163 countries in renewable energy and energy efficient technologies, covering related policy, regulatory framework, project development, and financial aspects of use and implementation. Additionally, RENAC is supporting major private and public organizations, international agencies, and governments by providing platforms for knowledge exchanges on energy-related topics.

Since 2016, RENAC is part of a consortium supporting the German Federal Ministry for Economic Affairs and Climate Action (BMWK) in its endeavor to strengthen its bilateral energy cooperation initiatives with the United States, Canada, Australia, and New Zealand. Within this consortium, RENAC organizes expert in-person delegation trips to Germany as well as virtual delegation conferences with the objective of helping to accelerate the global energy transition through knowledge exchanges and mutual learning opportunities with these partner countries.

Contact: Cecilia Strandberg, Project Director RENAC, strandberg@renac.de, +49 30 58 70870 42

NOTES

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